

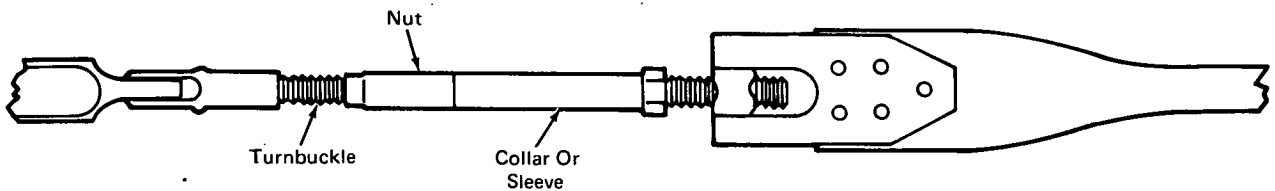
NASA TECH BRIEF

Marshall Space Flight Center



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Preload Indicating Turnbuckle



Pre-Stressed Turnbuckle Assembly

A turnbuckle for applying a predetermined load on strap assemblies for use in space program applications may have commercial applicability in areas of boating, antenna construction, oil drilling rigs, etc. The device is simple to manufacture and therefore may be produced at low cost. As shown in the diagram, a sleeve and nut are assembled on a turnbuckle that is then pulled to a predetermined load in a tension test machine. The nut is hand-tightened against the sleeve and the assembly removed from the machine and installed in the strap assembly and tightened as an ordinary turnbuckle. When strap tension has stretched the turnbuckle sufficiently to relieve the sleeve compression preload so that it rotates freely when turned by hand, the desired strap tension load has been attained.

Notes:

1. Information concerning this innovation may be of interest to manufacturers and users of turnbuckles.
2. Requests for further information should be directed to:

Technology Utilization Officer
Code A&TS-TU
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B72-10355

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to:

Patent Counsel
Code A&TS-PAT
Marshall Space Flight Center
Huntsville, Alabama 35812

Source: W. T. Appleberry of
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